

**Conference:** GRACE Science Meeting

**Location:** Potsdam, Germany

**Dates:** 11/9-11/13/2010

**Title:** “Fiber-based lasers as an option for GRACE Follow-On Light Source”

**Presenter:** Camp, Jordan

**Abstract:**

Fiber based lasers offer a number of attractive characteristics for space application: state of the art laser technology, leverage of design and reliability from the substantial investments of the telecon industry, and convenient redundancy of higher risk components through fiber splicing. At NASA/Goddard we are currently investigating three GFO fiber-based laser options: a fiber oscillator built in our laboratory; an effort to space qualify a commercial design that uses a proprietary high-gain fiber cavity; and the space qualification of a promising new commercial external cavity laser, notable for its low-mass, compact design. In my talk I will outline these efforts, and suggest that the GFO Project may soon have the option of a US laser vendor for its light source.